

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A device for processing images, comprising:

a compressing/coding unit ~~which encodes~~ configured to encode image data including a plurality of color components to produce ~~fixed length codes~~ encoded image data;

a memory unit ~~which stores therein the codes~~ configured to store the encoded image data produced by said compressing/coding unit, the memory unit having at least one memory space assigned to a part of the encoded image data, wherein the part of the encoded image data represents the plurality of color components;

a distribution-measurement unit ~~which measures~~ configured to measure a distribution of the plurality of color components ~~concurrently with the encoding of the image data performed by said compressing/coding unit~~; and

a memory-control unit ~~which releases~~ configured to release [[a]] the at least one memory space assigned to part of the codes relating to colors in said memory unit the part of the encoded image data if said distribution measurement unit detects that the distribution concentrates on a particular color composition, and records to record data indicative of the particular one of the plurality of color composition components in said memory unit, when the distribution concentrates on the one of the plurality of color components.

Claim 2 (Currently Amended): The device as claimed in claim 1, wherein said compressing/coding unit includes:

a color-conversion unit ~~which converts~~ configured to convert an input image into the image data including the plurality of color components;

a compression unit ~~which compresses~~ configured to compress the image data supplied from said color-conversion unit to provide compressed image data; and

a quantization unit ~~which quantizes~~ configured to quantize the compressed image data supplied from said compression unit.

Claim 3 (Currently Amended): The device as claimed in claim 2, wherein said compression unit ~~carries out~~ is configured to perform sub-band conversion to compress the image data supplied from said color-conversion unit.

Claim 4 (Currently Amended): The device as claimed in claim 2, wherein said compressing/coding unit further includes a block-division unit ~~which divides~~ configured to divide the input image into a plurality of blocks before the input image is supplied to said color-conversion unit.

Claim 5 (Currently Amended): The device as claimed in claim 1, wherein the ~~edges~~ encoded image data produced by said compressing/coding unit includes brightness information, structure information, and color information.

Claim 6 (Currently Amended): The device as claimed in claim 1, wherein said compressing/coding unit includes:

a compression unit ~~which compresses~~ configured to compress the image data including the plurality of color components to provide compressed image data, wherein the plurality of color components are R, G, and B components; and

a quantization unit ~~which quantizes~~ configured to quantize the compressed image data supplied from said compression unit.

Claim 7 (Currently Amended): The device as claimed in claim 6, wherein said distribution-measurement unit measures the distribution of the plurality of color components with respect to a (R-G) component and a (B-G) component.

Claim 8 (Currently Amended): An image processing system, comprising:

a scanner unit ~~which reads~~ configured to read an original image;

a compressing/coding unit ~~which encodes~~ configured to encode image data including a plurality of color components to produce ~~fixed-length codes~~ encoded image data;

~~a memory unit which stores therein~~ configured to store the ~~codes~~ encoded image data produced by said compressing/coding unit, ~~the memory unit having at least one memory space assigned to a part of the encoded image data, wherein the part of the encoded image data represents the plurality of color components;~~

~~a distribution-measurement unit which measures~~ configured to measure a distribution of the plurality of color components ~~concurrently with the encoding of the image data performed by said compressing/coding unit;~~

~~a memory-control unit which releases~~ configured to release [[a]] the at least one memory space assigned to ~~part of the codes relating to colors in said memory unit~~ the part of the encoded image data if said distribution-measurement unit detects that the distribution concentrates on a particular color composition, and ~~records to record~~ data indicative of the particular one of the plurality of color composition components in said memory unit, when the distribution concentrates on the one of the plurality of color components; and

~~a printer unit which prints~~ configured to print decoded data obtained ~~after~~ by decoding the ~~codes~~ encoded image data stored in said memory unit.

Claim 9 (Currently Amended): The image processing system as claimed in claim 8, further comprising an image decoding unit ~~which reads~~ configured to:  
~~read the ~~the~~ encoded image data and the data indicative of the particular one of the plurality of color composition components~~ from said memory unit, and  
~~decodes~~ decode the ~~the~~ encoded image data so as to provide decoded image, and  
followed by ~~determining~~ determine color components of the decoded image according to the data indicative of the particular one of the plurality of color composition components.

Claim 10 (Currently Amended): The image processing system as claimed in claim 8, wherein said compressing/coding unit includes:

a color-conversion unit ~~which converts data of~~ configured to convert the original image into the image data including the plurality of color components;  
a compression unit ~~which compresses~~ configured to compress the image data supplied from said color-conversion unit to provide compressed image data; and  
a quantization unit ~~which quantizes~~ configured to quantize the compressed image data supplied from said compression unit.

Claim 11 (Currently Amended): The image processing system as claimed in claim 10, wherein said compression unit ~~carries out~~ is configured to perform sub-band conversion to compress the image data supplied from said color-conversion unit.

Claim 12 (Currently Amended): The image processing system as claimed in claim 10, wherein said compressing/coding unit further includes a block-division unit ~~which divides~~ configured to divide ~~the data of~~ the original image into a plurality of blocks before the data of the original image is supplied to said color-conversion unit.

Claim 13 (Currently Amended): The image processing system as claimed in claim 8, wherein the ~~codes~~ encoded image data produced by said compressing/coding unit includes brightness information, structure information, and color information.

Claim 14 (Currently Amended): The image processing system as claimed in claim 8, wherein said compressing/coding unit includes:

a compression unit ~~which compresses~~ configured to compress the image data including the plurality of color components to provide compressed image data, wherein the plurality of color components are R, G, and B components; and

a quantization unit ~~which quantizes~~ configured to quantize the compressed image data supplied from said compression unit.

Claim 15 (Currently Amended): The image processing system as claimed in claim 14, wherein said distribution-measurement unit measures the distribution of the plurality of color components with respect to a (R-G) component and a (B-G) component.

Claim 16 (Currently Amended): A method of encoding images, comprising the steps of:

encoding image data including a plurality of color components to produce ~~fixed length~~ codes encoded image data;  
~~storing the codes in a memory;~~  
assigning at least one memory space of a memory unit to a part of the encoded image data, wherein the part of the encoded image data represents the plurality of color components;

measuring a distribution of the plurality of color components concurrently with the encoding of the image data; and

releasing [[a]] the at least one memory space assigned to the part of the codes relating to colors encoded image data in said memory if the distribution concentrates on a particular color composition, and recording data indicative of one of the particular plurality of color composition components in said memory, when the distribution concentrates on the one of the plurality of color components.

Claim 17 (Currently Amended): The method as claimed in claim 16, wherein said step of encoding of the image data includes the steps of:

compressing the image data including the plurality of color components to provide compressed image data, wherein the plurality of color components are R, G, and B components; and

quantizing the compressed image data.

Claim 18 (Currently Amended): The method as claimed in claim 17, wherein said step of measuring of the [[a]] distribution of the plurality of color components measures includes measuring the distribution of the plurality of color components with respect to a (R-G) component and a (B-G) 5 component.

Claim 19 (Currently Amended): A computer-readable medium having a program embodied therein for causing a computer to encode images, said program comprising the program-code steps of for:

encoding image data including a plurality of color components to produce fixed-length codes encoded image data;

~~storing the codes in a memory;~~

assigning at least one memory space of a memory unit to a part of the encoded image data, wherein the part of the encoded image data represents the plurality of color components;  
measuring a distribution of the plurality of color components concurrently with the encoding of the image data; and

releasing [[a]] the at least one memory space assigned to the part of the codes relating to colors encoded image data in said memory if the distribution concentrates on a particular color composition, and recording data indicative of one of the particular plurality of color composition components in said memory, when the distribution concentrates on the one of the plurality of color components.

Claim 20 (Currently Amended): The computer-readable medium as claimed in claim 19, wherein ~~said program code step of~~ encoding of the image data includes ~~the program code steps of~~:

compressing the image data including the plurality of color components to provide compressed image data, wherein the plurality of color components are R, G, and B components; and

quantizing the compressed image data.

Claim 21 (Currently Amended): The computer-readable medium as claimed in claim 20, wherein ~~said program code step of~~ measuring of the [[a]] distribution of the plurality of color components ~~measures~~ includes measuring the distribution of the plurality of color components with respect to a (R-G) component and a (B-G) component.

Claim 22 (New): The device as claimed in claim 1, wherein said distribution-measurement unit is configured to measure the distribution of the plurality of color components while the image data including a plurality of color components is being encoded.

Claim 23 (New): The device as claimed in claim 1, wherein the distribution concentrating on the one of the plurality of color components correlates to the one of the plurality of color components occupying at least 80% of the plurality of color components.

Claim 24 (New): The device as claimed in claim 8, wherein said distribution-measurement unit is configured to measure the distribution of the plurality of color components while the image data including a plurality of color components is being encoded.

Claim 25 (New): The device as claimed in claim 8, wherein the distribution concentrating on the one of the plurality of color components correlates to the one of the plurality of color components occupying at least 80% of the plurality of color components.

Claim 26 (New): The device as claimed in claim 16, wherein the distribution concentrating on the one of the plurality of color components correlates to the one of the plurality of color components occupying at least 80% of the plurality of color components.

Claim 27 (New): The device as claimed in claim 19, wherein the distribution concentrating on the one of the plurality of color components correlates to the one of the plurality of color components occupying at least 80% of the plurality of color components.